OBJWS Behavior of Gases

1. What happens when gas pressure exceed the strength of the container it's in?

2. If the number of particles in a container decrease by one half, then the pressure _____.

3. Gases cool when _____ and heat when they are _____.

4. If the temperature increases, then the pressure in a container _____. (Kinetic energy also _____.)

5. What is the difference between Real vs. Ideal Gases?

6. When warming occurs, dry ice changes. This is an example of what physical process?

7. What is Dalton's law of partial pressure?

8. Why must high altitude pilots have separate oxygen supply available?

9. State Boyle's Law.

10. What kind of relationship do the variables in Boyle's law have?

11. How many atm will you be at if you scuba to 40 meters below sea level?

12. Why can't you breathe normally below sea level? What happens physiologically to your body?

13. What happens to a diver if he/she returns to the surface to quickly?

14. State Charles' Law. What's happening with the pressure?

15. What kind of relationship do the variables in Charles' Law have?

16. Why would we want to liquefy oxygen, nitrogen, or argon?

17. State the Combine Gas Law.

18. A container of compressed nitrogen has a volume of 24.6 L and 80 atm pressure at 25 degrees Celsius. When the container cools, it is cooled to 20 atm. What is the new T of the gas?

19. State the Ideal Gas Law. What 2 things makes this law unique.

20. A tunnel contains 200 L of ethane (C_2H_4) gas at pressure of 0.70 atm and a temperature of 40 degrees Celsius. How many moles of ethane does this gas deposit contain?